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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,192	12/04/2003	Mark L. Buer	2875.0170001	7312
26111 7590 07/03/2007 STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			EXAMINER WILLIAMS, JEFFERY L	
			ART UNIT 2137	PAPER NUMBER
			MAIL DATE 07/03/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/728,192	Applicant(s) BUER ET AL.	
	Examiner Jeffery Williams	Art Unit 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1 – 53 are pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3 – 15, 18, 21, and 27 – 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "the another header" in line 1. There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination, the examiner presumes claim 3 to depend upon claim 2.

Regarding claims 5, 9, 18, and 30, they are rejected as being indefinite. The claim recitation of "...a Broadcom Ethernet type..." lacks a defined and customary meaning to those of ordinary skill in the art, thereby rendering the scope of these claims indeterminate. Additionally, the usage of the trademark "Broadcom" renders the scope of these claims uncertain since a trademark or trade name cannot be used properly to identify any particular material or product.

Claim 21 recites the limitation "the lower 22 bits of ..." in line 2. There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination, the examiner presumes the applicant to recite "a lower 22 bits of..."

Regarding claims 27 and 28, they are rejected as being indefinite. The respective limitations "wherein the generating step..." fail to particularly point out which generating step of claim 26 is being referenced, thus rendering the scope of claims 27 and 28 unclear.

Claim 34 recites the limitation "of the second, third and fourth bytes" in line 2. There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination, the examiner presumes the applicant to recite "of second, third and fourth bytes."

All depending claims to the above rejected claims are rejected by virtue of their dependency.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2137

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 4, 16, 17, 22 – 29, 31, and 35 – 53 are rejected under 35 U.S.C.

103(a) as being unpatentable over Bryers et al. (Bryers), U.S. Patent Publication 2003/0126233 in view of Cassidy, “An Ethernet Primer”.

Regarding claim 1, Bryers discloses:

generating at least one second Ethernet packet comprising at least one first Ethernet packet (par. 114, 118-120; fig. 4 – Herein, Bryers discloses a network service device that sends and receives packets via the Ethernet protocol);

and at least one address associated with at least one security association retrieving at least one security association from at least one data memory according to the extracted at least one address (par. 194, 199);

and encrypting at least a portion of the extracted at least one first Ethernet packet according to the retrieved at least one security association (par. 193, 194).

Bryers does not appear to provide a complete teaching regarding the operation of the Ethernet protocol. Thus, Bryers does not appear to disclose *extracting the at least one address and the at least one first Ethernet packet from the at least one second Ethernet packet*. However, Cassidy teaches the operation of Ethernet, comprising *extracting the at least one address and the at least one first Ethernet packet from the at least one second Ethernet packet* (Cassidy, pg. 2,3). It would have been obvious to one of ordinary skill in the art to recognize the teachings of Cassidy within

Bryers. This would have been obvious because one of ordinary skill in the art would have been motivated to enable operation using the Ethernet standard.

Regarding claim 37, it is rejected, at least, for the same reasons as claim 1, and furthermore because the combination enables a device comprising processors for operating according to the Ethernet and IPSEC protocols and *at least one data memory for storing at least one security association; at least one Gigabit MAC for receiving at least one second Ethernet packet* (Bryers, par. 199, fig. 4).

Regarding claim 41, it is rejected, at least, for the same reasons as claim 1, and furthermore because the combination enables for subscriber devices/servers to send TCP/IP packets to the network service device via Gigabit Ethernet (Bryers, par. 11, 12, 77, 113, 116 – therefore, Bryers enables for a processing means to do so (“a controller”)). Furthermore, Bryers enables *generating at least one TCP/IP packet; associating at least one security association with the at least one TCP/IP packet; and identifying at least one address associated with the at least one security association; and at least one Gigabit MAC for generating at least one Ethernet packet comprising the at least one TCP/IP packet and the at least one address* (Bryers, par. 120,121).

Regarding claims 2 – 4, 16, 25, 38, and 42 the combination enables *generating an outer Ethernet header and another header and wherein the another header comprises the at least one address and wherein the outer Ethernet header comprises*

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an Ethernet address of a security processor and wherein the extracting step comprises determining whether an Ethernet address from the at least one second Ethernet packet matches an Ethernet address of a security processor (Bryers, par. 120, 193; Cassidy, pg. 2,3).

Regarding claims 22 – 24, the combination enables retrieving security associations and encryption (Bryers 120 – 124).

Regarding claims 26 – 29 and 31, they comprise essentially similar recitations to the rejected claims above, and they are rejected, at least, for the same reasons.

Regarding claims 35 – 36, they comprise essentially similar recitations to the rejected claims above, and they are rejected, at least, for the same reasons.

Regarding claim 39, the combination enables, *wherein the at least one encryption processor comprises at least one IPSec processor* (Bryers, par. 120 –124).

Regarding claims 40 and 43, the combination does not appear to explicitly disclose that the system functioning means comprise integrated circuits. However, the method and advantages of manufacturing devices as integrated circuits was well known to those of ordinary skill in the art.

Regarding claims 17, 44 – 53, they comprise essentially similar recitations to the rejected claims above, and they are rejected, at least, for the same reasons.

Claims 5 – 15, 18 – 21, 30, 32 – 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Bryers and Cassidy in view of Stevens, TCP/IP Illustrated.

Regarding claim 5, the combination does not appear to explicitly disclose that Ethernet packets comprise fields. Stevens discloses that composition of packets sent via Ethernet, the composition comprising fields (Stevens, pg. 23, fig. 2.1). It would have been obvious to one of ordinary skill in the art to recognize the teachings of Stevens within the combination of Bryers and Cassidy. This would have been obvious because one of ordinary skill in the art would have been motivated to follow the established standard required to employ Ethernet.

Regarding claims 6 – 8, the combination enables *wherein the outer Ethernet header comprises a Broadcom Ethernet type field, and wherein a first byte of the another header comprises a zero, and wherein second, third and fourth bytes of the another header comprise the at least one address, and wherein the at least one address comprises a lower 22 bits of the second, third and fourth bytes* (Stevens, pg. 22, 23).

Regarding claims 9 - 12, they are rejected, at least, for the same reasons as claims 5 - 8.

Regarding claims 13 - 15, the combination enables *wherein the retrieving step comprises retrieving the at least one security association from a data memory in a security processor and wherein the encrypting step comprises using an encryption key associated with the at least one security association and wherein the encrypting step comprises using an encryption algorithm defined by the at least one security association* (Bryers, par. 120, 121, 124).

Regarding claims 18 - 21, they are rejected, at least, for the same reasons as claims 6 - 12.

Regarding claims 30, 32 - 34, they comprise essentially similar recitations to the rejected claims above, and they are rejected, at least, for the same reasons.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

See Notice of References Cited.


A shortened statutory period for reply is set to expire **3** months (not less than 90 days) from the mailing date of this communication.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery Williams whose telephone number is (571) 272-7965. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

J. Williams
AU: 2137
JW


CYNTHIA BRITT
PRIMARY EXAMINER
6-22-07